Appendix F
Rangeland Suitability Analysis

Medicine Wheel-Paintrock Ranger District, Bighorn National Forest
Beaver Creek Watershed Allotments

Antelope Ridge S&G	Hunt Mountain S&G	South Park C&H
Bear/Crystal Creek S&G	Little Horn S&G	Sunlight Mesa C&H
Beaver Creek S&G	Matthews Ridge C&H	Whaley Creek S&G
Finger Creek C&H	Red Canyon C&H	Wiley Sundown C&H
Grouse Creek S&G	Red Canyon S&G	

Updated 4/16/2011.

Introduction:

Rangeland Suitability[1]: The appropriateness of applying certain resource management practices to a particular area of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suitable for a variety of individual or combined management practices.

Although there is no regulatory requirement to do a Rangeland Suitability analysis at the project level (it is only an LRMP requirement) a project level Rangeland Suitability analysis can provide useful information to the deciding officer.

The number of acres and distribution of Suitable Rangeland on an allotment can be helpful in displaying spatial distribution of forage allocated to various uses. It can be compared to known or proposed livestock use patterns, and indicate management needs; it can be a useful tool in developing management strategies and identifying opportunities. It alone is rarely used to make management recommendations.

It can be used to describe stocking levels. A tabulation of total Rangeland acres Suitable for livestock grazing on an allotment can be useful in comparing the relative stocking levels in AUMs stocked per acre of Suitable Rangeland (AUM/acre). This "stocking rate" can provide the manager an indication of 1) the level of site production necessary to support this number of animals for this time frame, 2) the level of management required to make best use of available forage, 3) the likelihood that full numbers of stock will be supported for the scheduled season, 4) the likelihood that resource problems will occur, such as overgrazing, if full permitted AUMs are grazed. It alone is rarely used to make decisions about stocking or capacities, but it gives an indication.

Rangeland Suitability analysis is not used to decide where livestock may graze. It is not a decision to graze livestock on any specific area of land, nor is it a decision about or estimate of livestock grazing capacity. The Rangeland Suitability determination may or may not provide supporting information for a decision to graze livestock on a specific area. Intermingling of livestock between areas mapped as Suitable will occur on a land base of any significant size. Therefore, Rangeland Suitability determinations are not intended to imply that livestock will be precluded from being found on lands that may not be mapped as Suitable.

Many acres of forested and non-forested lands not mapped as "Suitable" still may provide forage for permitted livestock that may not be reflected in analysis. Transitory rangeland resulting from timber harvest or wildfire is normally not considered Suitable. Incidental use of livestock on lands not mapped as Suitable is normally permissible, but not necessarily planned for. Grazing or moving livestock through areas not mapped as Suitable is not prohibited under law, policy regulation or Forest Plan direction. In addition, the use of these areas is considered incidental and these areas are generally not preferred by livestock due to aspect, slope, lack of forage, etc. Areas not mapped as Suitable are included within allotments because of their intermingled nature and because it is more efficient and cost effective to locate allotment and pasture boundaries on ridgelines and other manageable geographic boundaries rather than attempting to arbitrarily require livestock to only be on specific acres that are determined to be Suitable. This would be extremely difficult if not impossible.

Actual stocking will be based on annual production, a history of meeting annual utilization guidelines, and meeting or moving toward the desired conditions. When guidelines for any year have been met, the livestock must be moved out of the key area, or they will be removed from the pasture or allotment. The permitted number and season of use is subject to change based on evidence of actual use and performance.

[1] 36 CFR 219.3 and FSM 1905

Analysis:

Beaver Creek Watershed:
An assessment of Suitable Rangeland was completed as part of the Big 6 Allotment analysis. It began with a review of the 2005 Forest Plan landscape level Rangeland Suitability analysis map, clipped to the Beaver Creek Watershed. The Tables below provide the acreage calculated as a result of that modeling exercise, described in the Final EIS for the Bighorn National Forest Land and Resource Management Plan (Forest Plan), November 2005.

Upon close review and in comparison with existing range analysis data (also provided in the tables below) as well as on the ground experience from BNF staff and the ID team, it was clear that the data used in revision of the Forest Plan is of limited value in site-specific application without extensive additional updating in most cases. Areas of considerable size that are known to be considered suitable for livestock grazing, as well as some areas known not to be suitable are not accurately displayed. Some large areas known to provide forage are omitted entirely, while in other areas rangeland is included that is not used by livestock. Polygons are inconsistent with actual on-the-ground areas of forage and vegetation types in site-specific areas.

Existing range analysis data, although sometimes relatively old, was determined in many cases to be more reflective of actual conditions, and is considered sufficiently accurate for use in planning.

In some circumstances however, neither the existing range analysis for a given allotment nor the Forest Plan Rangeland Suitability analysis provided sufficient information for making management decisions. Where this was the case (mainly on the S&G allotments) an additional analysis utilizing GIS and a combination of available data including forest vegetation, forest plan suitability analysis, soils, and range analysis maps was completed to create a map and calculate acres of Rangeland Suitable for livestock grazing. Updated range analysis maps were prepared and acres were determined, which may have resulted in some changes in numbers as compared to an older analysis where GIS technologies were not available. In other cases, updated acreage figures reflect changes that have occurred on the ground such as loss of transitory rangeland that was counted in an earlier analysis, or conifer encroachment that has taken over rangeland that was earlier considered suitable. In all cases an ID team provided input to the analysis, and Rangeland Suitability Criteria established for the watershed was applied (Appendix E).

The following is a detailed description of the process used for each allotment included in the Beaver Creek watershed wide analysis. Some allotments required a more detailed analysis than others. This is reflected in the tables provided as well as in the corresponding narrative.

Antelope Ridge S&G:

The total allotment acres changed between the Range Analysis and the updated analysis due to validating the allotment boundary between the Lake Creek C&H allotment on the Tongue Ranger District and the Antelope Ridge S&G allotment on the Medicine Wheel Paintrock Ranger District. The Forest Plan modeling exercise omitted some acres that were considered suitable in the 1984 Range Analysis. Professional knowledge from on the ground experience was used to validate this, and corrections were made to arrive at the 2006 Updated Analysis figures. The 2006 Updated Analysis acres are considered sufficient for planning purposes.

Table F-1 Antelope Ridge S&G

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1982 Revised *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Antelope Ridge S&G.	*	1,657		3,212	2,127	*	3,092	1,763	*

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1982 Revised *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
*This allotment was formerly run by itself with 1 band of 1,000 sheep for a season of 7/01-9/10, but permanent changes in 2002 resulted in this allotment being run in common with 2 other sheep allotments (Bear/Crystal Creek S&G and Beaver Creek S&G) with 1 band of 1600 dry ewes. This resulted in an overall reduction in permitted numbers and season across all three allotments, and is described in the Affected environment section of the range specialist report. As a result, the permitted AUMs column is not populated for these three individual allotments, but is shown in table #4 below.									

Bear/Crystal Creek S&G

The Forest Plan modeling exercise omitted many acres that were considered suitable in the 1980 Range Analysis. Professional knowledge from on the ground experience was used to validate this, and corrections were made to arrive at the 2006 Updated Analysis figures. The 2006 Updated Analysis removes the top of Bald Mt from the suitable range because it was closed to grazing by sheep in the 1980's and is a sensitive area due to the shallow soils. It also removed areas of secondary range that sheep do not get to behind the gravel pit on the west side. Horse Mesa Pasture has been considered suitable range in the past; however it has very limited unreliable water and should not be considered as primary suitable range. As a result, the acres for Horse Mesa Pasture are not included in the Suitable acres figure for the 2006 Updated Analysis. The 2006 Updated Analysis acres are considered sufficient for planning purposes.

Table F-2 Bear/Crystal Creek S&G

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1980 *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Bear/Crystal Creek S&G		1,986		7,258	*3,153		7,329	2,375	NA
*Figure comes from 1980 Range analysis summary sheets minus Pete's Hole for Bear and Crystal Creek allotments. It includes areas of secondary range and Horse Mesa pasture, and the top of Bald Mt. This allotment was formerly run by itself with 1 band of sheep 1200 mature for a season of 07/01-09/10. Permanent changes in 2002 resulted in this allotment being run in common with 2 other sheep allotments (Antelope Ridge S&G and Beaver Creek S&G) with 1 band of 1600 dry ewes. This resulted in an overall reduction in permitted numbers and season across all three allotments, and is described in the Affected environment section of the range specialist report. As a result, the permitted AUMs column is not populated for these three individual allotments, but is shown in table #F-4 below.									

Beaver Creek S&G

In comparing the 1980 Range Analysis with the Forest Plan modeling exercise, the Forest Plan model omitted acres that were considered suitable. In addition, the 1980 Range Analysis included Unit A (Bear Creek Mesa) and Unit B (the main portion of the allotment). Unit A has not been used as part of the capacity for this allotment since about 1980, and was not considered as suitable for this analysis. The data for the 1980 Range Analysis shown in the table below takes into account this and only includes what was formerly known as Unit B, however it includes some acres before allotment boundary changes took place between sheep allotment in 1986. The boundary change is accounted for in the 2006 Updated Analysis figures which were validated through on the ground experience and review of allotment files. The 2006 Updated Analysis is considered sufficient for use in planning.

Table F-3 Beaver Creek S&G

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1980 *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Beaver Creek S&G	*	768	*	4,940	*1,864	*	4,175	**1,464	
*The 1980 analysis showed 2,682 total suitable acres which included Bear Creek Mesa which is 818 acres. Since it is not considered as part of the forage base any longer it is removed from the 1980 suitable analysis acres. **The figure 1,464 comes from the 2006 updated suitable acres from the GIS exercise (1,824 acres) minus 360 acres on Bear Creek Mesa that were included as suitable but are no longer considered as part of the forage base. This results in the figure of 1, 464 suitable acres for planning purposes. The difference between the 1980 and 2006 acres is also attributed to the allotment boundary change.									

Combined totals of Antelope Ridge, Bear/Crystal Creek and Beaver Creek S&G allotments

This table combines the data from F-1, F-2, and F-3 to display it in a common place. Since these three allotments are now run in common with one band of sheep, it makes the most sense to view them as a whole rather than individually.

Table F-4 Combined totals of Antelope Ridge, Bear/Crystal Creek and Beaver Creek S&G allotments

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1982 Revised *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Antelope Ridge S&G.		1,657		3,212	2,127	*	3,092	1,763	*
Bear/Crystal Creek S&G		1,986		7,258	3,153		7,329	2,375	
Beaver Creek S&G		768		4,940	1,864		4,175	1,464	
Total combined	**915**	**4,411**	**4.8**	**15,410**	**7,144**	**7.8**	**14,596**	**5,602**	**6.1**

Finger Creek C&H

The existing range analysis completed in 1989 was found to be a sufficiently accurate for use in planning. As shown in table F-5 the 1989 analysis found 1,833 acres of the Finger Creek allotment Suitable to livestock grazing.

Table F-5 Finger Creek C&H

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1989 *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Finger Creek C&H	*	1,432		2,667	1,833	*	NA	NA	NA

*Finger Creek has been run in common with Wiley Sundown C&H since 1987, so permitted season of use and numbers has been for the combined allotments. As a result, the permitted AUMs are not populated for Finger Creek alone, but are shown combined with Wiley Sundown in Table F-8 below.

Wiley Sundown C&H

The existing range analysis completed in 1989 was found to be a sufficiently accurate for use in planning. As shown in table F-6 the 1989 analysis found 1,814 acres of the Wiley Sundown allotment Suitable to livestock grazing. This does not include the Spring Creek S&G allotment that was incorporated as a pasture in 2005 through the Tongue EIS decision.

Table F-6 Wiley Sundown C&H

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1989 *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Wiley Sundown C&H	*	1,649		4,262	1,814		NA	NA	

*Wiley Sundown has been run in common with Finger Creek C&H since 1987, so permitted season of use and numbers has been for the combined allotments. As a result, the permitted AUMs are not populated for Wiley Sundown alone, but are shown combined with Finger Creek in Table F-8 below.

Grouse Creek S&G

The Grouse Creek S&G allotment is a sheep and goat allotment that is presently vacant and proposed for conversion for use by cattle as a pasture in the Wiley Sundown & Finger Creek rotations. The 1976 Range Analysis was completed for sheep and is not accurate for use by cattle, so a review of slope, soils, Forest Plan modeling, and on the ground knowledge was

conducted and an updated analysis map was created to show what is considered Suitable for cattle. The total acres also changed as a result of calculations based off of GIS mapping. The 2006 updated Analysis is considered sufficient for planning purposes for Line #2 which shows use with cattle.

Table F-7 Grouse Creek S&G

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1976 *Range Analysis For Sheep*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Line#1 Grouse Creek S&G Sheep	Vacant	1,649		4,262	1,814	NA	NA	NA	NA
Line#2 Grouse Creek C&H Cattle	*****	**1,649**		**NA**	**NA**	**NA**	**3,904**	**1,699**	*****

This allotment is proposed to be used as a pasture in the rotation with Wiley, Sundown, Finger Creek, and Spring Creek in Alternative 3. So line #2 in table F-7 would be combined with the total of all 3 in Table F-8 to get the figures for Alternative 3. *Scott Gall's 1991 capacity estimate of 360 AUMs assumed even cattle distribution, 50% use levels, and 720 lbs forage/AUM (Gall, 1991 Analysis of Allotment Consolidation Draft Document). During three years of trial cattle grazing in the early 1990's, permittees were not able to achieve even distribution, and met or exceeded use levels around water points while other areas of the allotment received little use. The allotment has also had sagebrush treatment proposed and attempts to burn it in recent years have been unsuccessful. As a result, it is estimated that the capacity for Grouse Creek as a C&H allotment would be approximately 264 AUMs of use, which would be about 6.4 suitable acres per AUM if grazed alone. This stocking level is a conservative estimate.

Wiley Creek C&H (various combinations of Wiley Sundown, Finger Creek, Spring Creek, and Grouse Creek for Alternative 2 and Alternative 3)

This table combines the data from F-5 and F-6 and F-7 to display it in a common place. Since Wiley Sundown Finger Creek and Spring Creek are presently run in common under alternative 2 with one herd of cattle, it makes the most sense to view them as a whole rather than individually. Data for Spring Creek is added in the table to reflect the addition of suitable acres added to Wiley Sundown through the Tongue decision in 2005, and would be considered the current management under alternative 2.

Table F-8 Wiley Sundown, Finger Creek, Spring Creek, and Grouse Creek Combined

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1989 *Range Analysis for Wiley and Finger*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Wiley Sundown C&H		1,649		4,262	1,814		NA	NA	NA
Finger Creek C&H		1,432		2,667	1,833		NA	NA	NA
Total of 2	**1,160**	**3,081**	**2.7**	**6,929**	**3,647**	**3.1**	**NA**	**NA**	**NA**
This represents the total combined for Wiley Sundown and Finger Creek.									
				1981 Range Analysis for Spring Creek			*2006 Updated Analysis*		
				Allotment Total Acres	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Spring Creek				2,500	1,345		NA	NA	NA
Alt 2 Total of all 3	**1,160**			**9,429**	**4,922**	**4.2**	**NA**	**NA**	**NA**
This represents the total combined by incorporating Spring Creek which was added as a pasture to Wiley Sundown in 2005. The 1981 Range Analysis data for Spring Creek was considered sufficient for planning and the figures from it are combined with the 1989 Range Analysis figures for Wiley Sundown and Finger Creek to get the total of all 3 which is what is occurring under Alternative 2.									
				2006 Updated Analysis for Grouse Creek					
				Total Acres	*Suitable Acres*	*Suitable Acres/AUM*			
Grouse Creek				3,904	1,699	NA	NA	NA	NA
Alt 3 total of all 4	**1,160**			**13,333**	**6,621**	**5.7**	**NA**	**NA**	**NA**
This represents the total combined by incorporating Grouse Creek with Wiley Sundown, Finger Creek, and Spring Creek to get the total of all 4 which is what is proposed under Alternative 3.									

Hunt Mt S&G

The Forest Plan modeling exercise omitted acres that are considered suitable. The existing range analysis completed in 1986 was found to be a sufficiently accurate for use in planning. As shown in table F-9, the 1986 analysis found 3,609 acres of the Hunt Mt. allotment Suitable for livestock grazing. This allotment is presently vacant, but is proposed as a forage reserve under Alternative 3.

Table F-9 Hunt Mt S&G

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1986 *Range Analysis*			*2009 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Hunt Mt S&G	Vacant	2,259		9,565	3,609	NA	NA	NA	NA
The allotment was previously permitted 1150 sheep 6/11-9/15 for 3667 SMs (1100 AUMs) which would be 3.2 suitable acres/AUM. If the allotment is grazed as a forage reserve, the maximum AUMs that should be considered for grazing on the allotment if stocked in full would be approximately 602 AUMs or 6.0 suitable acres/AUM. This is a conservative estimate as this allotment has had considerable conifer encroachment since it was last grazed and sagebrush densities have also increased.									

Little Horn S&G

The 1981 Range analysis was updated in 1986 to reflect a change in acres due to an allotment boundary change that occurred in 1986. A letter dated March 31, 1986 documents this boundary change, and can be found in the Little Horn S&G 2210 allotment folder. The Beaver Creek Analysis Area Allotment Management Plan Revisions Livestock Vegetation and Rangeland Vegetation Specialist Report also discuss this boundary change. The 1986 Updated Range Analysis is found to be sufficiently accurate for planning purposes. As shown in table F-10, the 1986 updated analysis found 2,327 acres of the Little Horn S&G allotment Suitable for livestock grazing.

Table F-10 Little Horn S&G

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1981 *Range Analysis*			1986 Updated *Range Analysis Letter dated March 31, 1986*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Little Horn S&G	852	2,542	3.0	3,702	1,552	1.8	4,966	2,327	2.7

Matthews Ridge C&H

This is part of a BLM rotation, but the figures below are only for the Forest portion. The 2006 Updated Analysis is found to be sufficiently accurate for planning purposes. As shown in table F-11, the 2006 Updated Analysis found 294 acres of the Matthews Ridge C&H allotment Suitable for livestock grazing. An additional 55 acres is under a special use permit as a horse pasture.

F-11 Matthews Ridge C&H

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1976 *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Matthews Ridge C&H	174	123	0.7	738	*333	1.9	605	*294	1.7
*An additional 55 acres are under a special use permit as a Horse Pasture, but are not considered part of the suitable for the grazing permit. The difference in both allotment total acres and suitable acres from the 1976 range analysis to the 2006 updated analysis acres can be attributed to the use of improved technology for the calculation of acres. The acres in the 1976 analysis were based on calculations using dot grids or planimeters which were the most accurate methods at the time. The 2006 acres were derived through the use of GIS acre calculations..									

Red Canyon S&G

The existing range analysis completed in 1981 was found to be a sufficiently accurate for use in planning. As shown in table F-12, the 1981 analysis found 1,573 acres of the Red Canyon S&G. allotment Suitable to livestock grazing. This allotment is presently vacant, but is proposed as a forage reserve under Alternative 3.

Table F-12 Red Canyon S&G

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1981 *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Red Canyon S&G	Vacant	935	NA	2,857	1,573	NA	NA	NA	NA
These acres came from the Range Analysis Summary sheets for the two pastures that remain in the allotment, after part was combined with Wallrock-Hidden Tepee S&G.									

Red Canyon C&H

The Forest Plan model omitted large acres of rangeland that are considered Suitable for livestock grazing.
The existing range analysis completed in 1979 was found to be a sufficiently accurate for use in planning. As shown in table F-13, the 1979 analysis found 2,792 acres of the Red Canyon C&H. allotment Suitable to livestock grazing.

Table F-13 Red Canyon C&H

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1979 *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Red Canyon C&H	Vacant	468	NA	6,405	2,792	NA	NA	NA	NA

South Park

This is part of a BLM rotation, but the figures below are only for the Forest portion. The 1976 Range Analysis is found to be sufficiently accurate for planning purposes. As shown in table F-14, the 1976 Range Analysis found 668 acres of the South Park C&H allotment Suitable for livestock grazing.

F-14 South Park C&H

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1976 *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
South Park C&H	334	618	1.9	1,152	668	2.0	NA	NA	NA

Sunlight Mesa

The existing range analysis completed in 1987 was found to be a sufficiently accurate for use in planning. As shown in table F-15, the 1987 analysis found 5,798 acres of the Sunlight Mesa C&H allotment Suitable to livestock grazing.

Table F-15 Sunlight Mesa

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1987 *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Sunlight Mesa C&H	1,371	5,007	3.7	13,045	5,798	4.2	NA	NA	NA

Whaley Creek S&G

The existing range analysis completed in 1981 was found to be a sufficiently accurate for use in planning. As shown in table F-16, the 1981 analysis found 2,792 acres of the Whaley Creek C&H allotment Suitable to livestock grazing. This includes 380 acres of BLM land that is part of the Hudson Falls Pasture.

Table F-16 Whaley Creek S&G

Allotment	*Permitted AUMs*	*2005 Forest Plan Model*		1981 *Range Analysis*			*2006 Updated Analysis*		
		Suitable Acres	*Acres/ AUM*	*Allotment Total Acres*	*Allotment Suitable Acres*	*Suitable Acres/AUM*	*Total Acres*	*Suitable Acres*	*Suitable Acres/AUM*
Whaley Creek S&G	*833	1,321	1.6	**6,396	**2,792	3.4	NA	NA	NA

*At present (as of 3/5/2010) there is a preferred applicant on file, and once they prove they are qualified they will receive a permit for a season and number equal to these AUMs. Update: In May 2010, the preferred applicant elected to not become qualified to hold the permit as they were not interested in having a sheep operation. The inquired about cattle and were informed that cattle would not be considered in the upper 3 pastures but would be considered in the Hudson Falls Pasture.

**There are 380 acres of BLM lands included in this figure that are part of the Hudson Falls pasture and is grazed in common with the Forest.